

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: JCoote@aol.com  
Subject: [2424] Another Regen RX  
Message-ID: <950809192654\_70411508@aol.com>

Those interested in superregenerative receivers, and who want "store-bought" might also look at the one offered by MFJ. I *\*think\** it may be offered in ready-made and kit form? No, I don't own one.

73, Jay  
WB6AAM

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: PDouglas12@aol.com  
Subject: [2425] ARRL HQ  
Message-ID: <950809195643\_51528584@aol.com>

Hi Guys,

I did get to visit HQ in Newington today. It is a neat place, with a lot of people working there--I think they said more than 100 full time. Anyway it is quiet and they work hard there.

I did get a chance to put W1AW on the air QRP by cutting back the power on their Yaesu FT1000. Y'know I really can't resist a comment that there is no excuse for a chattering relay (really loud too) in a rig costing a gazillion dollars. I guess the mfr assumed nobody would really expect to operate CW with it. I like the "silky smooth QSK" in my little Explorer--and my NW--and my SWL80 much better! Good thing, 'cause I cain't hardly afford to buy one of them FT1000 thangs anyway. And my much cheaper FT757gx is relay-less, and it it 1985 vintage. What are those guys over at Yaesu thinking anyway?

How'd I do? Well, 30m was dead at 1:00pm here. However, 40m had signs of life, and I worked a Dick N8\*\* (didn't make a copy of the log-dumb) in WV.

It took him two overs to figure out this here QRP station he was working was really W1AW. Then he asked for a QSL card. Incidentally, if you work W1AW, they do QSL, but you must send a SASE with your card first.

72, Preston WJ2V

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: JimN00CT@aol.com  
Subject: [2422] callsign servers.....  
Message-ID: <950809192324\_70405323@aol.com>

I take it the <callbook@n8emr.cmhnet.org> server for callsigns doesn't work anymore. Are there any other email type callsign servers available [besidesthe fcc]?

73, Jim N00CT

----- =\_aaaaaaaaaa--

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: adam@philadelphia.libertynet.org (Adam O'Donnell)  
Subject: [2427] Colorbursters?  
Message-ID: <9508100029.AA01784@philadelphia.libertynet.org>

Is there alot of fellows operating around 3.59 around here?

73

--

Adam O'Donnell, N3RCS  
Amsat: N3RCS@AMSAT.ORG  
Internet: ADAM@LIBERTYNET.ORG

"I want to know how God created this world. I am not interested in this or that phenomenon. I want to know His thoughts, the rest are details."

-- Albert Einstein

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: adam@philadelphia.libertynet.org (Adam O'Donnell)  
Subject: [2426] DC Rx in Aug QST  
Message-ID: <9508100029.AA01833@philadelphia.libertynet.org>

Has anyone taken a look at the DC Rx in the Aug issue of QST? It seems to use a VX0 as the VBF0... tuned for 40m. I was wondering what kind of oscillator that is? I have been staring at this circuit for the past few days trying to classify what it is so I can screw around with the coponent values. I would like to get this thing to work around the color burst frequency.

73

--

Adam O'Donnell, N3RCS  
Amsat: N3RCS@AMSAT.ORG  
Internet: ADAM@LIBERTYNET.ORG

"I want to know how God created this world. I am not interested in this or that phenomenon. I want to know His thoughts, the rest are details."

-- Albert Einstein

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: Jeff Gold <JMG@tntech.edu>  
Subject: [2434] FT-7  
Message-ID: <01HTW0BV1VDE9008SD@tntech.edu>

Saw this posted, in case anyone missed it:

Subject: FS: Yaseu FT-7 QRP HF RIG  
From: mikedom@aol.com (MikeDom), America Online, Inc.  
(1-800-827-6364)  
From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: "John F. Woods" <jfw@jfwhome.funhouse.com>  
Subject: [2435] looking up callsigns via email  
Message-ID: <199508101819.0AA08371@jfwhome.funhouse.com>

I forgot who asked about alternative callsign lookup by email servers, but I just spotted this on rec.radio.amateur.misc:

From: flloyd@qrz.qrz.com (Fred Lloyd, AA7BQ)  
Organization: QRZ Ham Radio  
From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: dh@deneb.csustan.edu (Doug Hendricks)  
Subject: [2429] Need 50Hz time base generator  
Message-ID: <9508100721.AA04152@deneb.csustan.edu>

NorCal is in desperate need of a 50Hz timebase generator for a future project. We would like to locate a source for the M706BI chip that was produced by SGS Thompson. Do any of you have a source? Also, could someone call SGS Thompson and see if they know of a source? Thanks a bunch.  
72, Doug, KI6DS

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: Goran Hosinsky <hosinsky@royac.iac.es>

Subject: [2430] NN1G 30m rig in EA8 (long)  
Message-ID: <9508100958.AA01617@royac8.royac.iac.es>

I have finished my NN1G 30m rig now and I found it a very nice kit. I am especially impressed by the frequency stability, less than 100 HZ drift from cold start. I have also added a the RIT modification, a Curtis keyer chip, the SWR meter from June QST and an overvoltage/wrong polarity protection (a 15V zeener + fuse). All so far in a test chassie until I find that everything works well.

My only problem with the kit was a solder blob - so big that I thought I had soldered a component there - which shorted out the audio. I found the adjustment of C23/C27, the bandpass filter, very critical, when they were a little off output jumped up to 2.5 Watt with the drive control giving either full output or nothing.

RIT has too small frequency excursion for my taste but works very smoothly. I did have to add about 40 pF in parallel over the coil as C8, the frequency set trimmer cap, does not have sufficient range when adding or subtracting a turn on the coil when the RIT circuit is connected. Otherwise I could not get the rig to work 10.100-10.130 as I wanted.

SWR meter is very good and simple. Very easy to adjust the ATU with this meter and does not take up much space as it does not use a meeter but leads.

The additions all fit on a board 3x4", same size as the rtx. The final enclosure will stack the boards with the controls on the top lid for ease of using portable with the rig on the ground.

No QSO so far, a combination of QTH location and operating hours. I can hear some Europeans but I have an 8000 feet high mountain between me and Europe and that probably kills my signal. The US lies wide open over the sea but band is open in that direction around 2am local and my favorite pastime at that hour is sleeping. I have put up a 200' long Zepp which should give good radiation into the US and one of these nights I will try to stay awake. Anyhow, my plans are to use the rig at work on top of the 8000 feet mountain and from there I have \ worked qrp on 30 m before.

The last part of the building did with one eye shut after an eye operation and I was surprised of how difficult it is to make

a good solder connection with only one eye! That hot iron lands everywhere but where you think that you are pointing it.

Saludos everybody, and excuse me the bandwitdh!

73      Goran      ea8yu      hosinsky@royac.iac.es

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: NYOUNG@nova.wright.edu  
Subject: [2428] One more regen set... well, maybe two...  
Message-ID: <01HTVTEJVM4935UPA@nova.wright.edu>

I have before me two publications with regen circuits in 'em. One is SPRAT #70, Spring 1992. The other is HB-4 from Modern Radio Labs.

The SPRAT circuit is "Nicky's TRF," which I believe is available from Kanga/Kanga US. It's a toroid coil job, if my reading glasses are working and it uses an LM386 in the AF circuit. Pretty neat stuff. I might even buy one myself... when I get the magnifying glass fixed.

The MRL circuit uses an IC5 or IQ5 tube in a typical regen circuit for tubes. Modern Radio Labs copyrighted the book in 1953 and the author, Elmer G. Osterhoudt, evidently had a lot of radio experience. The inside cover of the book says "With Radio Since 1915."

I have a modified version of one of these sets, complete with the coils for LW, MW and SW (3-18 MHz) reception. My version was built on a metal frame with a metal front panel, so it doesn't regen really well. Maybe I should follow Elmer's advice and put it on plywood or masonite.

I do know that the "MRL #2 Long Distance Crystal Set" that I built back around 1975 works really well on a long wire and a ground. Back in 76 or so I heard WHO in DeMoines, IA on it using 75 ft of wire up about 35 ft. Of course I had 25k Ohm headphones. You need 'em for real crystal sets.

I don't know if MRL is still open for business. The last I heard from Elmer was back around 1978 or 1980. That was when I got the coils for a double-tuned crystal set from him. That and some hardware and crystals. The address on the mailing label says

Modern Radio Laboratories  
Experimenters Headquarters  
P.O. Box 1477  
Garden Grove, CA 92642

Elmer used to publish a bunch of books on crystal sets, crystals that you could use in crystal sets, antenna stuff for crystal sets, information sheets on different circuits, stuff on fixing old radios. All kinds of stuff. His catalog alone was a regular store-house of radio lore. If he's still around, he's probably pretty well up in years, what with being with radio since 1915. Cindy's grandfather was 15 back then. Dad was 4. William Burroughs and Julio Cortazar were each 1 year old. Now that's a sobering thought, ain't it?

By the way, did you know that if you put carborundum crystals in an old fashion fuse holder and keep 'em under some kinda pressure, you can make 'em into radio detectors. You have to reverse bias 'em, of course. A potato might just give you enough voltage to do it. And always wind your crystal set coils on cellophane sheets. It's easy once you get the hang of it. Elmer did.

73  
Nils  
WB8IJN &c

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: [2436] Protecting QRP rigs around QRO RF  
Message-ID: <n1404053145.34295@msmailgw1.arlut.utexas.edu>

Larry recently posted a QRP+ failure story that prompted me to send him so thoughts and philosophy on Electro magnetic compatibility, having worked on various standards testing and immunity projects over the years.

INMHO, one should unplug any unused rig from the wall, and no coax should be left plugged into it, especially if a QRP rig; unless you have protective circuits on the final and receiver input, and even then, I leave the power and RF unplugged from several QRO rigs I have as collector items, just to be cautious.

Hams often forget that in the "old days" when radio cabinets were steel, the rigs were somewhat protected, because you had a magnetic shield in the (steel)

cabinet, and an electric shield. Modern aluminum cabinets are electric field shields, but poor magnetic shields. I installed a shelf so I do not have to stack rigs on top of each other. They are pretty close side to side, but leave some space for ventilation, and you will lessen coupling also.

Some breadboard, cabinetless or plastic cabinet commercial kits have NO intrinsic protection of their circuits.

Leaving even a short coax jumper cable plugged into a rig, even if the other end is not plugged into anything, creates an antenna of the length of coax.

Tuners that have multi-rig inputs switched to various loads, antennas or the tuner itself, usually have unshielded switches and jumper wires that can pick up RF inside the tuner box.

At field day this summer, I noted a B&W 300 Watt tuner would not function with an 80 meter coax fed dipole if it sat upon the top of a TS-140 transceiver, but with the SAME Coax jumper between them, it functioned fine if they sat side by side with a little space - a foot---clearly RF in the shack. The B&W includes a small square of steel above and below the vertically mounted coil, but the rest of the box is aluminum,-- NO MAGNETIC SHIELDING.

The above can not prevent damage to a rig without protective circuits, but it can perhaps help, and is offered as an aid to those who combine QRO and QRP operations from one desk.

72, Stuart K5KVH  
rohre@arlut.utexas.edu

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: JCoote@aol.com  
Subject: [2423] QRP & Related pages?  
Message-ID: <950809193046\_70411627@aol.com>

I am looking for QRP, Antenna & Ham related pages. In the interest of bandwidth, please send 'em to me by email.

Thanks,

Jay  
WB6AAM

jcoote@aol.com

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: LVE1@inel.gov (Larry East)  
Subject: [2432] QRP+ Tale of Woe  
Message-ID: <9508101409.AA20147@garnet.inel.gov>

I need your input! But first, some background...

My long awaited QRP+ arrived on June 6, 1995 -- I made several contacts with it over a period of 3-4 weeks on 80/40/30/20M CW and it seemed to be working "as advertised". Then I turned it on one night around the 10th of July or so and it "popped" the fuse -- replaced the fuse and it "popped" again! I sent it back to Index, and they (fairly promptly) found that the problem was a shorted final (an IRF510 FET). They also found that one of the relays that switch the transmitter output networks was shorted and the receiver input mixer (an SBL-1) was smoked. Their theory at that time was that the relay shorted, caused the final to oscillate and blow out, also taking out the receiver mixer in the process.

Got the rig back from Index on July 28, fired it up on 40M, and it seemed to be working OK (made two QSO's). Turned it off and didn't turn it on again until August 7, at which time the receiver was dead and no transmitter output. Sent it back to Index with a letter suggesting that maybe they should replace the whole thing.

Received a call from Bruce at Index yesterday afternoon at work; he said that the transmitter final and receiver mixer were smoked again. His theory this time is that it was "zapped" by an electrical discharge and/or RF from "a nearby transmitter". He offered to refund my money or fix it, but that it was up to me to "cure the problem" and he wouldn't replace the same parts again (although he would refund my money at a later time if the rig was otherwise undamaged).

Here's a run-down of my setup and operating procedures:

The QRP+ sits on top of my FT-301 xceiver (capable of about 125 Watts PEP output) -- but NOT directly over the 301 RF amplifier assembly (about three inches from it). When the QRP+ is in use, its output goes to an Oak Hills WM-1 Wattmeter (sitting on top of the QRP+) which feeds an MFJ antenna tuner; a 50 dummy load is connected via a switch in the tuner when not connected to my antenna. My antenna is a GAP Voyager DX-IV (47 feet tall) located about 130 feet from the house and fed by RG-213 buried under ground for about 50 feet and laying on the ground the rest of the way to the antenna. The shield of the coax is grounded near the base of the antenna to a 10 foot long copper pipe sunk into our rather poorly conducting eastern Idaho soil. (The base of the GAP floats



above ground by design.) I don't have any indication of RF in the shack, and can operate a portable TV with rabbit ears in the shack even when using my QRO power of 100W. I don't need the tuner with the GAP, and leave it bypassed (again, via a switch in the tuner).

When the FT-301 is in use, the antenna jack of the QRP+ is left connected to the WM-1 but no cable is connected to the output of the WM-1; the QRP+ antenna jack is therefore essentially floating.

Between the time I received the QRP+ back from repair and when I noticed it had died again, I did use my FT-301 on 10M SSB. (The GAP is not designed for 10M, but it loads OK with the tuner bypassed and there is no indication of any RF in the shack.) I had also used the FT-301 on 80M CW after initially getting the QRP+, but the QRP+ was still working OK after that. It seems unlikely that the QRP+ would have picked up enough RF to blow both the mixer and final -- particularly since the final is NOT connected to the antenna connector EXCEPT when the QRP+ is transmitting (a small relay does the switching). Before I got the QRP+, my HW-9 sat in exactly the same spot on top of the FT-301 for several years with no ill effects (but I was using a different antenna -- a HyGain 5-band vertical about 50 feet from the house). I also have a TenTec 509 sitting next to the FT-301 which has also not suffered any ill effects.

I could understand a static or lightning-induced discharge from my big vertical antenna taking out the receiver mixer and possibly arcing across the relay and taking out the final -- but the rig was NOT left connected to the antenna when not in use; it was either connected to a dummy load or not connected to anything but the WM-1 Wattmeter. Maybe the a discharge could have arced across the switch in the tuner, but the '301 was (I think...) connected to the tuner the last time the QRP+ failed. Oh yes... I do have a 10K 1/2W resistor across the antenna connector of my tuner for static discharge (don't think its blown, but better check...)

Is the QRP+ really THAT sensitive to stray RF?? If so, seems to me that there is a deficiency in its design. Looking at the schematic, there are NO protection diodes across the receiver mixer input, nor any type of protection (zeiner diode, etc.) for the final. What are your thoughts, folks? Does it seem reasonable that enough static discharge could get into my shielded 50 dummy load (its in an oil filled one-quart paint can) to damage the QRP+? How about RF from my FT-301?

I would like to hear from other QRP+ owners: have you experienced any similar problems? If so, what did you do to cure them?

Please respond direct so we don't get a lot of flak about this turning in to a QRP+ user's group list...

72, Larry W1HUE/7  
LVE1@inel.gov

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: LVE1@inel.gov (Larry East)  
Subject: [2433] Question...  
Message-ID: <9508101430.AA20579@garnet.inel.gov>

Is this turning into a "Chuck Adams Fan Club" list, or what? Just wondering...

Please douse all flames with water (source of your choice)!

From qrp-1@lehigh.edu Thu Aug 10 19:30:00 1995  
From: Paul Harden <pharden@aoc.nrao.edu>  
Subject: [2437] SCHEMATIC: Regen RX (long)  
Message-ID: <199508102119.PAA08974@zia.aoc.nrao.edu>

#### SCHEMATIC DIAGRAM -- REGENERATIVE RECEIVER

Designed by Charles Kitchin, N1TEV

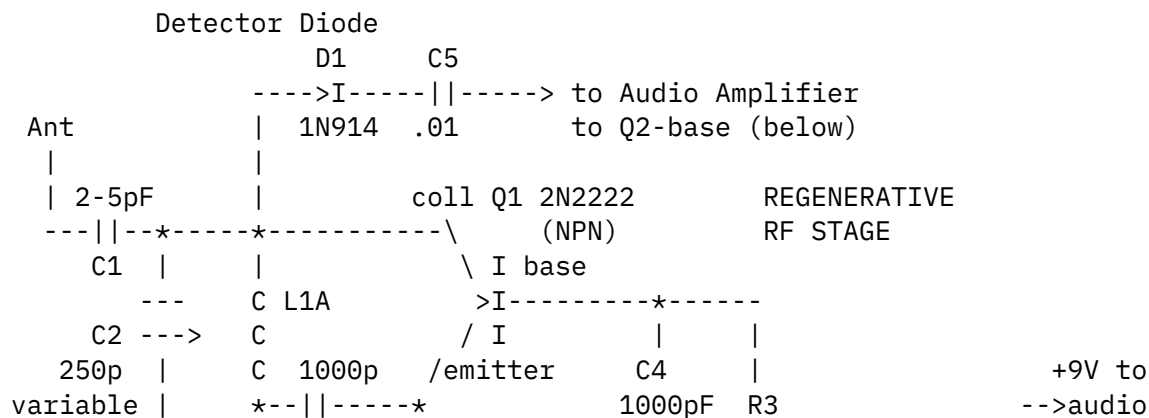
LM386 Audio amplifier added by Paul Harden, NA5N

Original circuit: August 18, 1994 EDN magazine

and December 1994, "CQ" Magazine

See also 1995 Radio Amateur's Handbook "Beginners Regen. Receiver"

See NOTES at bottom of schematic





mini film variable capacitor (Radio Shack part), or salvaged from any AM transistor radio.

7. C11 optional. It increases the audio gain of the LM386. Without C11, gain will be 20dB. C11 can be 2uF or higher.
8. Audio amplifier Q2 can be omitted with lower audio gain and some "pulling" of the receiver. Connect D1 directly to C10.
9. I recommend using a transistor socket for Q1; experiment with different transistors you might have for best performance. Judge based on ease of oscillation and overall gain.
10. Do not mount inside a metal enclosure. The metal cover will lower the Q of L1 and can keep it from oscillating.
11. D2-D4 form a simple voltage regulator to keep 1.5v on Q1-base. Any small signal diode will work for D1-D4.

Cost of parts is \$10-15. At Radio Shack, a couple of 2N2222's are \$1; an LM386 about \$3; a mini tuning cap \$3; small speaker \$2.

#### OPERATION:

Regenerative receivers have a "romance" of their own and it takes a little experience and patience for optimum performance.

Turn on power and advance regeneration control R2 until the circuit oscillates (squeels). Back off to the point where oscillation just stops. This is the highest gain and highest selectivity. Now tune around until you hear a station. You will have to carefully adjust the REGEN control to the critical point (just before oscillation) after even small changes in tuning. For voice modulation, such as the BBC London, adjust REGEN control for best sounding audio. For CW/SSB transmissions, advance REGEN control just slightly into oscillation for proper detection/audio sound. It takes some practice, but once properly tuned and REGEN set, you'll be amazed at the short wave stations you'll hear and fairly good sounding audio.

If possible, try to use a tuning cap (C2) that has a gear-reduction scheme; very small changes in C2 can be 10-20 KHz. A smaller variable cap, say 5-50pF, can be added across C2 for a "fine tune" control. For calibration, it is best to make a "log scale," that is, a dial that points to numbers 1-10. Then, as you identify stations and the operating frequency, you can make a table or chart that shows what logging number equals what frequency.

For the 5-10 MHz range, you will hear powerful international broadcast stations around 6-6.5 MHz, 7.2 MHz and 9.5-10 MHz. Using virtually the circuit above, I have heard the BBC London, Radio Netherlands, NHK Tokyo, R. Havana Cuba, HCJB Quito Ecuador and others with a modest antenna (a 30 foot long wire).

Once you get it working, experiment with it. Wind different coils for

different frequency ranges. Have fun. Great club project.

72, Paul NA5N (pharden@nrao.edu)

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This circuit is being issued to the QRP-L mailing list in response to the numerous requests received. It is intended for the use of the QRP-L subscribers. Not to be published or electronically distributed without citing originating credit. This information will appear as an article in the September 1995 issue of "Low Down," Colorado QRP Club. Thereafter, the article may be freely reproduced in any QRP journal. (Camera ready copy will then be available to QRP editors upon request).

Read the prospectus carefully before you invest or send money.  
Past performance does not guarantee future yields.

From qrp-l@lehigh.edu Thu Aug 10 19:30:00 1995  
From: rgobrick@public.compuserve.com (Robert J. Gobrick)  
Subject: [2431] Re: NN1G 30m rig in EA8  
Message-ID: <199508101231.KAA29494@public.compuserve.com>

Goran,

Thanks for the feedback on your NN1G 30 meter rig. By the way I'm up in St. John's Newfoundland and I have a straight North-South over the water shot to Spain. So there is a good chance we may run into each other on 30 meters since I have worked into Spain and Portugal before on 30 meters during the evenings.

73/72 Bob VO1DRB/WA6ERB

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| Bob Gobrick VO1DRB/WA6ERB/VE2DRB Newfoundland, Canada |
| QRP'er Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      bgobrick@terra.nl.net.nf.ca |
|               rgobrick@public.compuserve.com |
| Compuserve:   70466.1405@compuserve.com |
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From qrp-l@lehigh.edu Thu Aug 10 19:30:00 1995  
Subject: QRZ E-Mail Callsign Server Available

We're pleased to announce that you can now lookup callsigns via e-mail. To lookup any callsign in the QRZ database, send a message to:

lookup@qrz.com

Your message may contain one or more lines which contain the word 'lookup' followed by a callsign to look for.

Example:

lookup aa7bq  
lookup w1aw

Please feel free to give it a try and pass the info on to your friends.

73,

-fred AA7BQ

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Fred Lloyd, AA7BQ | Author, QRZ Ham Radio CDROM | flloyd@qrz.com  
Scottsdale, Arizona | For CD info email info@qrz.com | http://www.qrz.com  
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